

**CLAIMS**

What is claimed is:

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1. In a communications network having a plurality of users competing for network resources, a method for allocating the network resources comprising the steps of:

10 determining a set of distribution parameter associated with each of said plurality of users;  
transmitting, from each of said plurality of users to a network resource manager, a request for network access and an estimated set of distribution parameters associated with a particular one of said plurality of users;  
15 predicting whether sufficient network resources exist to accommodate said request based on a plurality of said estimated set of distribution parameters; and allocating the network resources in accordance with said prediction.

2. The method of claim 1, further comprising transmitting, from said network resource manager to said plurality of users, information indicative of the allocation of the network resources.

20 3. The method of claim 1, wherein said step of allocating network resources comprises allocating network resources in a cellular telephone network, and further wherein said plurality of users comprise a corresponding plurality of cellular telephones.

25 4. The method of claim 1, further comprising providing a preemption process to allow a high-priority user to preempt service from a low-priority user.